

OPPORTUNITY #18

WHAT IF THERE WAS A ONE-STOP SOLUTION FOR BETTER MENTAL HEALTH?

THE WIRED BRAIN

Advanced, ultra-precise brain-mapping technology identifies the causes of mental health conditions and provides effective and immediate treatments

WHY IT MATTERS TODAY

Globally, one in four people will experience a mental health condition during their lives and two-thirds of them will not receive the treatment they need.¹⁷⁸

Depression is the most common, with 264 million people suffering globally.¹⁷⁹ Despite the increasing need for mental health support, only around half of the 194 member states of the World Health Organisation (WHO) have mental health policies that are in line with international standards.

Depression rates amongst adults in the Middle East and North Africa (MENA) region range from 13% to 18%, with rates among women double those in men.¹⁸⁰

From a support perspective, even though the global median number of mental health workers per 100,000 people has increased from 9 in 2014 to 13 in 2020, support varies. The number of mental health workers in high-income countries is more than 40 times higher than in low-income countries.¹⁸¹

Inadequate support for mental health results in financial and productivity losses. The estimated cost to the global economy is \$1 trillion per year in lost productivity. However, and on the positive side, for every \$1 put into treatment for common mental disorders, there is a return of \$4 in improved health and productivity.¹⁸²





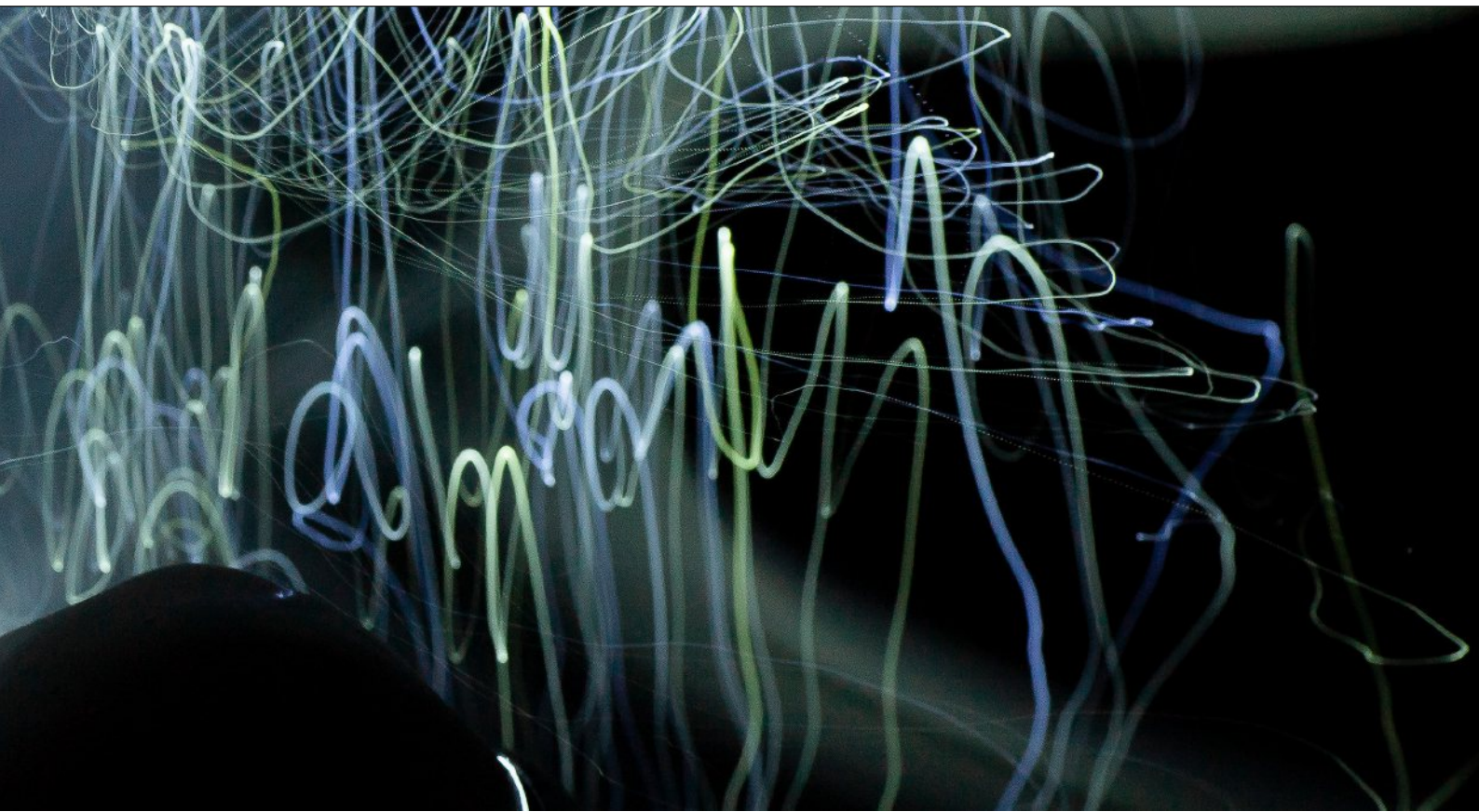
THE OPPORTUNITY TOMORROW

Brain-computer interfaces can improve mental health, treat anxiety and possibly alleviate feelings of loneliness.

Researchers have already found that stimulating certain areas of the brain can suppress neural responses associated with phobias. In the future, new neural technologies, medications and improved social understanding of mental health could potentially combine to virtually eradicate common conditions such as depression.

These technologies include precision brain mapping and modelling, non-invasive transcranial stimulation and personalised drug treatments that are monitored in real time. Advanced brain-mapping technology offers the potential for everyone to play a part in improving mental health by using wearables that enable early recognition and personalised treatment for conditions. By using such technologies, patients can read about their brain scans and learn more about their own cases. Families can understand mental health disorders that affect loved ones and medical professionals can use brain maps to better diagnose mental illnesses.

The global wearable technology market is set to reach \$265 billion by 2026, with an annual growth rate of 18%¹⁸³ and the global behavioural health software market is expected to reach \$4.9 billion by 2026 from \$2 billion in 2021, an annual growth rate of 19.6%.¹⁸⁴ In the Middle East and North Africa region, the wearable medical device market is estimated to grow at 18.2% and be worth \$896 million by 2026.¹⁸⁵



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BENEFITS

With better diagnosis and treatment of mental health conditions, people no longer suffer their debilitating impacts, improving the quality of life for themselves and their families. Wider communities benefit from the reduced long-term costs of treating mental health conditions.

RISKS

Risks include unintended consequences of treatments, such as personality changes and the potential for hacking into neural networks. Unequal access to new treatments could also widen inequalities in well-being.

UNINTENDED CONSEQUENCES

There is a risk of malicious harm through abuse of technologies or deliberately returning false-positive results.